

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A lens for reading an original, comprising:
first, second, third, and fourth lens groups including at least five lenses, sequentially arranged from an object side;
the first lens group having a positive first lens;
the second lens group having a negative second lens;
the third lens group having a positive reflecting refracting power and including a third lens and a fourth lens cemented to each other;
the fourth lens group including a positive meniscus fifth lens or a negative meniscus fifth lens having a convex surface facing the object side;
an aspherical surface provided on a surface of said five lenses; and
an aperture stop disposed between said second lens group and said third lens group.

Claims 2-3 (Canceled).

Claim 4 (Previously Presented): The lens according to claim 1, wherein said third lens is a positive lens and said fourth lens is a negative lens, and a cemented lens is constructed by the third and fourth lenses.

Claim 5 (Previously Presented): The lens according to claim 1, wherein said third lens is a negative lens and said fourth lens is a positive lens, and a cemented lens is constructed by the third and fourth lenses.

Claim 6 (Previously Presented): The lens according to claim 1, wherein at least one surface of the first lens is said aspherical surface.

Claims 7-8 (Canceled).

Claim 9 (Previously Presented): The lens according to claim 4, wherein at least one surface of the first lens is the aspherical surface.

Claim 10 (Previously Presented): The lens according to claim 5, wherein at least one surface of the first lens is the aspherical surface.

Claim 11 (Canceled).

Claim 12 (Previously Presented): The lens according to claim 1, wherein a combined focal length f with respect to an e line of an entire lens system, a focal length f_1 with respect to an e line of the first lens counted from the object side, averages: $n_{\text{凸}}$ and $n_{\text{凹}}$ of all positive lenses and all negative lenses, respectively, of a refractive index with respect to a d line of a lens material, and averages: $\nu_{\text{凸}}$ and $\nu_{\text{凹}}$ of all positive lenses and all negative lenses, respectively, of an Abbe's number of the lens material satisfy following conditions:

$$0.40 < f_1 / f < 0.57 \quad (1)$$

$$0.08 < n_{\text{凸}} - n_{\text{凹}} < 0.14 \quad (2)$$

$$3.47 < \nu_{\text{凸}} - \nu_{\text{凹}} < 19.49 \quad (3).$$

Claims 13-16 (Canceled).

Claim 17 (Previously Presented): The lens according to claim 1, wherein said five lenses are all glass lenses, and said aspherical surface is formed by a glass mold.

Claim 18 (Currently Amended): The lens according to claim 17, wherein at least one surface of the fourth lens from the object side of said five lenses is the aspherical surface.

Claim 19 (Currently Amended): A method for reading an original, comprising: preparing a lens for reading an original, the lens including: four lens groups including at least five lenses, sequentially arranged from an object side, a first lens group having a positive first lens, a second lens group having a negative second lens, a third lens group having a positive reflecting refracting power in which a third lens and a fourth lens are cemented, a fourth lens group including a positive meniscus fifth lens or a negative meniscus fifth lens having a convex surface facing the object side, an aspherical surface provide provided on a surface of said five lenses, and an aperture stop disposed between said second lens group and said third lens group;

disposing the original on a contact glass facing said first group lens;
illuminating said original in a slit like shape;
imaging by reducing a reflected light from a portion illuminated in the slit like shape on a line sensor by said lens for reading an original; and
reading an original image by illuminating and scanning a surface of said original with relatively displacing the illuminated portion and the original in a direction perpendicular to a longitudinal direction of said portion illuminated in the slit like shape.

Claim 20 (Previously Presented): The method according to claim 19, wherein a degree of illumination in said illuminated portion in the slit like shape in the original, on said contact glass, increases from a center of the slit toward both end portions in a longitudinal direction of the slit.

Claim 21 (Currently Amended): A device for reading an original, comprising:
an illumination system configured to illuminate an original;
an image-forming lens configured to reduce and image a light reflected on the original illuminated by the illumination system;
a line sensor configured to conduct a photoelectric transfer of an original image imaged by the image-forming lens; and
said image-forming lens including:
at least five lenses as a whole including at least two positive and two negative lenses, said at least five lenses being sequentially arranged from an object side,
an aspherical surface provided on at least one surface of said five lenses,
four lens groups for the at least five lenses, sequentially arranged from the object side, which include a cemented lens constructed by cementing one of said positive lenses and one of said negative lenses,
a fourth lens group including a positive meniscus fifth lens or a negative meniscus fifth lens having a convex surface facing the object side,
an aperture stop disposed between the second and third lens groups, and
said cemented lens being disposed adjacent to the aperture stop.

Claim 22 (Previously Presented): The device according to claim 21, wherein a component configured to decompose a color to read the original image with a full-color is included on an optical path of an optical system.

Claim 23 (Currently Amended): An image forming apparatus for forming an image information as an image, comprising:

a device configured to read an original image in order to change the original image to the image information; and

said device including:

an illumination system configured to illuminate an original,

an image-forming lens configured to reduce and image a light reflected on the original illuminated by the illumination system, and

a line sensor configured to conduct a photoelectric transfer of the original image imaged by the image-forming lens, and

said image-forming lens having:

at least five lenses as a whole including at least two positive and two negative lenses, said at least five lenses being sequentially arranged from an object side,

an aspherical surface provided on at least one surface of said five lenses,

four lens groups for the at least five lenses, sequentially arranged from the object side, which include a cemented lens constructed by cementing one of said positive lenses and one of said negative lenses,

a fourth lens group including a positive meniscus fifth lens or a negative meniscus fifth lens having a convex surface facing the object side, an aperture stop disposed between the second and third lens groups, and said cemented lens being disposed adjacent to the aperture stop.

Claim 24 (Currently Amended): An image forming apparatus for forming an image information as an image, comprising:

a device configured to read an original image to change the original image to the image information; and

said device including:

an illumination system to illuminate the original,

an image-forming lens to reduce and image a light reflected on the original illuminated by the illumination system, and

a line sensor to conduct a photoelectric transfer of the original image imaged by the image-forming lens, and

said image-forming lens having:

at least five lenses as a whole including at least two positive and two negative lenses, said at least five lenses being sequentially arranged from an object side,

an aspherical surface provided on at least one surface of said five lenses,

four lens groups for the at least five lenses, sequentially arranged from the object side, which include a cemented lens constructed by cementing one of said positive lenses and one of said negative lenses,

a fourth lens group including a positive meniscus fifth lens or a negative meniscus fifth lens having a convex surface facing the object side, an aperture stop disposed between the second and third lens groups, and

said cemented lens being disposed adjacent to the aperture stop, wherein

said device includes a component configured to decompose a color to read the original image with a full-color on an optical path of an optical system.

Claim 25 (Previously Presented): The apparatus according to claim 21, wherein a photosensitive media configured to form an image by writing an image information with a light scanning is included.

Claim 26 (Previously Presented): The apparatus according to claim 22, wherein a photosensitive media configured to form an image by writing an image information with a light scanning is included.

Claim 27 (Original): The apparatus according to claim 25, wherein as said photosensitive media, a photoconductive photoconductor is used so as to visualize an electrostatic latent image, which is written by the light scanning, with a prescribed color of a toner.

Claim 28 (Original): The apparatus according to claim 26, wherein as said photosensitive media, a photoconductive photoconductor is used so as to visualize an

electrostatic latent image, which is written by the light scanning, with a prescribed color of a toner.

Claim 29 (Canceled).

Claim 30 (New): A lens for reading an original, comprising:
first, second, third, and fourth lens groups including at least five lenses, sequentially arranged from an object side;
the first lens group having a positive first lens;
the second lens group having a negative second lens;
the third lens group having a positive refracting power and including a third lens and a fourth lens cemented to each other;
the fourth lens group including a positive meniscus fifth lens or a negative meniscus fifth lens having a convex surface facing the object side;
an aspherical surface provided on a surface of said five lenses; and
an aperture stop disposed between said second lens group and said third lens group,
wherein
at least one surface of the first lens is the aspherical surface.